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A STUDY ON THE IMPACT OF LEARNING AND DEVELOPMENT IN BUILDING TECHNICAL AND BEHAVIORAL COMPETENCIES FROM HR MANAGER

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ABSTRACT
Employee competencies play a crucial role in improving organizational performance and achieving business objectives. Learning and Development (L&D) programs are essential for enhancing employees' technical knowledge and behavioral skills in the workplace. This study examines the role of Learning and Development initiatives in building technical and behavioral competencies among employees at Tesa Tapes. The research reviews how structured training programs, skill development initiatives, and continuous learning opportunities contribute to improving employees' job-related technical abilities as well as behavioral competencies such as communication, teamwork, problem-solving, and leadership. The study also highlights that effective L&D programs increase employee productivity, engagement, and overall performance. Furthermore, organizations that invest in systematic training and competency development programs create a skilled workforce capable of adapting to changing business environments. The findings emphasize the importance of implementing well-planned Learning and Development strategies to strengthen both technical and behavioral competencies, thereby enhancing employee effectiveness and supporting organizational growth.
KEYWORDS: *Learning and Development, Technical Competencies, Behavioral Competencies, Employee Performance, Training and Development, Human Resource Management.*

INTRODUCTION

Learning and Development (L&D) plays a vital role in enhancing employee capabilities and improving organizational performance. In today's competitive business environment, organizations focus on developing both technical competencies and behavioral competencies among employees to ensure productivity, innovation, and effective teamwork.

Technical competencies refer to the knowledge and skills required to perform specific job tasks effectively, whereas behavioral competencies include communication skills, leadership abilities, teamwork, adaptability, and problem-solving capabilities. Through structured training programs, workshops, coaching, and development initiatives, organizations help employees enhance these competencies.

Tesa Tapes, a global manufacturer of adhesive products and solutions, emphasizes continuous learning and employee development to maintain high standards of performance and innovation. The Learning and Development function at Tesa Tapes focuses on strengthening employees' technical knowledge while also improving their interpersonal and managerial skills. This study aims to analyze how L&D initiatives contribute to developing both technical and behavioral competencies among employees at Tesa Tapes.

REVIEW OF LITERATURE

Ambasa and Labitad (2022) highlighted the importance of Learning and Development programs in enhancing competencies, which further improved performance and satisfaction at work. They emphasized that employees who participated in structured training programs demonstrated higher levels of professional competency and were more effective in their respective roles. The study also revealed that organizations that consistently invested in L&D initiatives experienced stronger workplace relationships and improved team dynamics among employees. They further noted that competency development programs not only enhanced individual performance but also contributed significantly to overall organizational productivity and growth. They recommended implementing competency development and training programs to strengthen professional skills and workplace relationships, while also suggesting that training initiatives should be regularly evaluated and updated to meet evolving organizational and industry demands.

Jatoi (2022) found that competency-based training and assessment significantly improved technical and behavioral skills, teaching methods, and practical strategies. He highlighted the importance of Learning and Development programs in building both technical and behavioral competencies. The results also showed that teachers' behavioral and psychological factors strengthened the effectiveness of training in improving overall teaching performance.

Zamora (2022) evaluated the Implementation of the Competency Assessment Package (ICAP) designed to improve the competence and skills of automotive educators. The training program included five competency areas based on TESDA training regulations, namely preventive maintenance, electrical wiring installation, drum brake system disassembly, manual transmission, and drive-light vehicles. Using a developmental research design, the study assessed educators' performance in terms of reliability, credibility, safety, repair techniques, and problem-solving skills.

The results revealed that the ICAP training program was highly satisfactory and effective, significantly improving educators' competency levels from below expectations to very satisfactory performance..
Kammee (2023) aimed to compare students' reading comprehension abilities before and after using task-based reading instruction and to measure their satisfaction with this learning method. The study involved 20 second-year vocational students from Phetchabun Technical College over a 5-week period. Using lesson plans, reading comprehension tests, and a satisfaction questionnaire, the results revealed that students' reading comprehension significantly improved after the task-based instruction, and their overall satisfaction with the learning method was found to be high.

Lema (2023) examined technical education and training (TET) management practices in developing soft skills , self-employment among learners in Ilala Municipality, Tanzania. Using a qualitative multiple-case study ,data were collected from directors, instructors, and learners through interviews, focus groups, and document reviews. The findings revealed that although many participants understood the importance of soft skills some had limited awareness, and the development of these skills was hindered by theoretical teaching methods and limited participation. The study concluded that effective TET management and stronger partnerships with educational stakeholders were essential to improve soft skills development, promote self-employment, and support national development

RESEARCH OBJECTIVES

- To analyze the impact of Learning and Development (L&D) programs on building technical and behavioural competencies among employees.
- To identify key factors influencing the effectiveness of training programs in improving employee skills and performance.
- To examine how organizations can enhance Learning and Development initiatives to strengthen employee competencies and overall productivity

RESEARCH HYPOTHESIS

H1 : Learning and Development (L&D) programs have no significant impact on employees' technical competencies at Tesa Tapes.
H2: Learning and Development initiatives have no significant effect on employees' behavioral competencies such as communication, teamwork, and leadership.
H3: There is no significant relationship between training and development programs and employee performance at Tesa Tapes.
H4 : Learning and Development practices do not significantly contribute to overall employee competency development

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RESEARCH METHODOLOGY

S.NO	COMPONENTS	DESCRIPTION
1	Research Design	The study uses a descriptive research design to understand the role of Learning and Development (L&D) in improving employees' technical and behavioral competencies.
2	Research Approach	The study follows a quantitative research approach where numerical data is collected and analyzed
3	Source of Data	**Primary Data**: Collected through questionnaires from employees. **Secondary Data**: Collected from journals, books, company reports, and websites.
4	Sample Size	The Cosist of 80 Employes Working at tea Tapes India Pvt Ltd
5	DataCollection Method	Data is collected using a structured questionnaire and survey method from employees of Tesa Tapes
6	Research Instrument	A structured questionnaire with multiple-choice and Likert scale questions to measure technical and behavioral competency development.
7	Study Size	The study is conducted at Tesa Tapes organization.
8	Limitations	The study is limited to a specific organization, limited sample size, and time constraints.

DATA ANALYSIS AND INTERPRETATION

DEMOGRAPHIC ANALYSIS

Variable	Category	No. of Respondents
Age	Below 25	32
	35–45	4
	Above 45	2
Gender	Male	15
	Female	30
Education	SSLC	2
	Diploma	3
	Degree	14
	Postgraduate	26
Department	HR	16
	Finance	8
	Production	5
	Marketing	4
	Others	12
Work Experience	1–3 Years	32
	5–10 Years	3
	Above 10 Years	7
TOTAL RESPONSE		45

INTERPRETATION

The age distribution indicates that a majority of the respondents (32 out of 45) are below 25 year. This shows the organization is largely composed of young employees who are likely to be more adaptable, energetic, and open to learning and development initiatives. A smaller proportion of employees fall into higher age categories, indicating limited representation of senior workforce

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Technical Competencies

Response	No. of Respondents	Percentage (%)
Strongly Agree	13	28.89%
Agree	16	35.56%
Neutral	10	22.22%
Disagree	4	8.89%
Strongly Disagree	2	4.44%
Total	45	100%

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INTERPRETATION

The table shows that a majority of respondents have a positive opinion. About 48.89% of respondents agree and 26.67% strongly agree, which together account for more than 75% of the total responses. This clearly indicates a strong positive perception toward the statement.

A smaller portion, 15.56% of respondents, have given a neutral response, suggesting that some employees are uncertain or neither strongly influenced nor opposed.

Only a very small percentage of respondents have expressed negative opinions, with 6.67% disagreeing and 2.22% strongly disagreeing. This indicates minimal dissatisfaction among respondents.

Behavioral Competencies

Responses	No. of. Responses	Percentages %
Strongly Agree	13	28.89%
Agree	16	35.56%
Neutral	10	22.22%
Disagree	4	8.89%
Strongly Disagree	2	4.44%
Total	45	100%

INTERPRETATION

The table indicates that a majority of respondents have a positive opinion. Around 35.56% of respondents agree and 28.89% strongly agree, which together account for more than 60% of the total responses. This shows that most employees have a favorable perception.

One-Sample T-Test — Hypothesis Testing

Construct	Mean	t-value	p-value	Decision	Effect Size-Cohen's d
Technical competency	3.83	11.469	<0.001	Reject H0	1.711 (large)
Behavioral competency	3.87	10.501	<0.001	Reject H0	1.566 (large)
Overall L&D impact	3.89	14.355	<0.001	Reject H0	2.142(large)

INTERPRETATION

All three constructs — Technical Competency (t = 11.469), Behavioral Competency (t = 10.501), and Overall L&D Impact (t = 14.355) — have p-values less than 0.001, so the null hypothesis is rejected in all cases. The Cohen's d effect sizes are all well above 0.8, confirming very large practical significance. The Overall L&D Impact construct has the highest t-value (14.355) and the largest Cohen's d (2.142), indicating that employees at Tesa Tapes perceive L&D programs as having a strong overall positive influence

ANOVA ANALYSIS TOOL USED: One-Way ANOVA

Demographic	F-value	p-value	Result	Interpretation
Age Groups	1.725	0.177	Not Significant	Age has no significant effect on technical competency perception.
Gender	1.843	0.181	Not Significant	Gender has no significant effect on technical competency perception.
Experience	0.122	0.886	Marginal	Work experience has no significant effect on technical competency perception

INTERPRETATION

The one-way ANOVA was conducted to examine whether demographic variables — Age, Gender, and Work Experience — have any significant influence on employees' Technical and Behavioral Competency perceptions at Tesa Tapes, at a significance level of $\alpha = 0.05$.

With respect to Age, the results indicate that age does not significantly influence technical competency scores ($F = 1.725$, $p = 0.177$), and hence the null hypothesis is accepted. However, age significantly influences behavioral

competency scores (F = 2.867, p = 0.048), leading to the rejection of the null hypothesis. This suggests that employees of different age groups perceive the impact of L&D programs on behavioral competencies such as communication, teamwork, and adaptability differently, with younger employees likely showing stronger positive perceptions compared to older employees.

Comparative Effectiveness: Technical And Behaviour

Rank	Type	Initiative	Mean	Agree%
1	Technical	Skill building	3.96	75.6%
2	Behaviour	Teamwork	4.04	73.3%
3	Technical	Training adequacy	3.87	75.6%
4	Behaviour	Communication	3.87	71.1%
5	Technical	Practical exposure	3.87	68.9%
6	Behaviour	Collaboration	3.84	64.4%

Key Finding: Behavioral competency (avg r = 0.69) slightly forms Technical competency (avg r = 0.65); Teamwork + Industry Relevance = top statistical priorities.

Result

The study demonstrates that Learning and Development programs play a vital role in building both technical and behavioral competencies among employees in the manufacturing sector. Initiatives such as on-the-job training, practical exposure, and industry-relevant technical programs, along with behavioral initiatives like teamwork, communication, and adaptability training, significantly enhance employees' job performance and organizational effectiveness. These structured L&D programs motivate employees to continuously improve their skills and align their competencies with the strategic goals of the organization

KEY FINDINGS

When employees undergo structured Learning and Development programs they improve both their technical & behavioral competencies consistently.This is because trained employees tend to perform better and contribute more effectively to organizational goals.

Providing employees with practical exposure and on-the-job training along with industry-relevant technical programs both help them perform better. Using both technical and behavioral training together works more effectively than focusing on one alone.

When employees feel that training programs are relevant and adequate it helps them stay engaged and motivated to learn. This makes them more committed to developing their skills and helps the organization grow.

If the L&D programs match the specific technical and behavioral needs of employees they perform significantly better. If the training does not align with their job requirements or experience level it may not produce the desired competency improvement.

Factors like a supportive work environment, adequate training opportunities, and departmental-level training support also enhance the effectiveness of L&D programs. These elements make employees more technically skilled and behaviorally competent, ultimately improving overall productivity.

SUGGESTIONS

Based on the findings, it is suggested that the organization should focus on improving the effectiveness of its training programs by incorporating more practical and hands-on learning methods. Training sessions should be updated regularly to align with current industry trends and technological advancements. Special emphasis should be given to enhancing communication and other soft skills, as some employees showed neutral responses in these areas. The organization can also introduce personalized training programs tailored to different experience levels to ensure better learning outcomes.

Furthermore, the use of interactive training methods such as workshops, group discussions, and role-playing activities can increase employee engagement. Continuous feedback and evaluation mechanisms should be implemented to assess the effectiveness of training programs. It is also important to ensure that training opportunities are equally accessible to employees across all departments. Introducing mentorship programs for less experienced employees can further strengthen skill development. By addressing the neutral responses and

focusing on quality improvements, the organization can enhance the overall impact of its Learning and Development initiatives.

CONCLUSION

The study on the impact of Learning and Development (L&D) in building technical and behavioural concludes that L&D plays a crucial role in enhancing employees' overall capabilities. It helps in improving technical knowledge required for job performance while also developing essential behavioural skills such as communication teamwork, adaptability, and leadership. These combined competencies enable employees to perform their roles more efficiently and contribute effectively to organizational success.

The findings further reveal that organizations that prioritize continuous learning and structured training programs are better equipped to develop a skilled and competent workforce. Learning and Development initiatives not only improve employee performance but also boost confidence, motivation, and job satisfaction. This, in turn, leads to higher productivity and improved workplace relationships.

In conclusion, effective L&D practices are essential for both individual and organizational growth. Organizations should focus on implementing regular, need-based training programs and modern learning methods to ensure continuous skill enhancement. By doing so, they can build a strong, adaptable workforce capable of meeting challenges and achieving long-term success.

Additionally, the study highlights that Learning and Development (L&D) initiatives play a key role in reducing skill gaps within the organization. By identifying training needs and addressing them through targeted programs, organizations can ensure that employees remain updated with the latest industry trends and technological advancements. This not only enhances individual competency levels but also strengthens the organizationtion compete in a dynamic business environment.

Moreover, L&D programs contribute significantly to employee retention and career development. When employees are provided with opportunities to learn and grow, they feel valued and are more likely to remain committed to the organization. Continuous development initiatives create a positive work culture that encourages innovation knowledge sharing, and collaboration among employees.

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